

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Original) A light quantity adjusting device comprising:

an annular rotary member having a magnetizing portion in a plane that is parallel to a radial direction of the annular rotary member;

an annular coil disposed in an outer diameter side or an inner diameter side of the rotary member;

an annular first stator disposed in a direction that is orthogonal to a radial direction of the rotary member, the annular first stator comprising first magnetic pole portions that oppose the rotary member;

an annular second stator disposed in a direction that is orthogonal to the radial direction of the rotary member, the annular second stator comprising second magnetic pole portions that oppose the rotary member from an opposite side of the first magnetic pole portions; and

one or more light controlling members that are disposed between the rotary member and the first stator and/or between the rotary member and the second stator and that move into, and out of, a light path according to rotation of the rotary member, controlling the quantity of light that passes through, the light path being a path for light passing therethrough opening portions of the rotary member, the coil, the first stator, and the second stator.

2. (Original) A light quantity adjusting device according to Claim 1, wherein the surface area

of an opening portion formed in the light path is changed by moving the one or more light quantity controlling members into and out of the light path.

3. (Original) A light quantity adjusting device according to Claim 1, wherein the one or more light quantity controlling members are semitransparent members, and the transmittance of the light path is changed by moving the one or more light quantity controlling members into and out of the light path.

4. (Original) A light quantity adjusting device according to Claim 1, wherein the one or more light quantity controlling members are formed by using a non-magnetic material.

5. (Original) A light quantity adjusting device according to Claim 1, further comprising a bobbin that winds around the coil, wherein the magnet and the bobbin are positioned to be superimposed over their entire circumferences when seen from a center axial direction.

6. (New) A light quantity adjusting device comprising:

an annular magnet;

an annular coil disposed outside or inside of said annuaal magnet;

an annular stator provided in one side facing said magnet and the other side facing said magnet in a direction of rotation axis of said magnet; and

a light quantity adjusting member disposed between said magnet and said stator, wherein said light quantity adjusting member is adapted to move into or out of a light traveling path that passes through opening portions of said magnet, said coil and said stator

in association with rotation of said magnet so as to adjust quantity of the light passing through said openings.

7. (New) A light quantity adjusting device according to claim 6, wherein said stator comprises a first stator having first magnetic pole portions that oppose said magnet and a second stator having second magnet pole portions that oppose said magnet from an opposite side of the first magnet pole portions.

8. (New) A light quantity adjusting device according to claim 6, wherein an area of the opening provided on the light traveling path is changed by causing said light quantity adjusting member to move into or out of the light traveling path.

9. (New) A light quantity adjusting device according to claim 6, wherein said light quantity adjusting member is a semitransparent member and the transmittance of said light traveling path is changed by causing said light quantity adjusting member to move into or out of said light traveling path.

10. (New) A light quantity adjusting device according to claim 6, wherein said light quantity adjusting member is formed by using a non-magnetic material.

11. (New) A light quantity adjusting device according to claim 6 further comprising a bobbin around which said coil is wound, wherein said magnet and said bobbin have overlapping portions over their circumferences when seen from a center axial direction.